

WHAT IS CLAIMED IS:

1. A method of determining the potential of developing bone disease in a multiple myeloma patient, said method
5 comprises the step of:

examining the expression level of WNT signaling antagonist, wherein increased expression of said antagonist compared to that in normal individual indicates that said patient has the potential of developing bone disease.

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2. The method of claim 1, wherein said WNT signaling antagonist is soluble frizzled related protein 3 (SFRP-3/FRZB) or the human homologue of Dickkopf-1 (DKK1).

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3. The method of claim 1, wherein said expression level is determined at the nucleic acid level or protein level.

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4. A method of treating bone disease in a multiple myeloma patient, said method comprises the step of inhibiting the expression of a WNT signaling antagonist.

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5. The method of claim 4, wherein said WNT signaling antagonist is soluble frizzled related protein 3 (SFRP-3/FRZB) or the human homologue of Dickkopf-1 (DKK1).

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6. The method of claim 4, wherein the expression of said antagonist is inhibited at the nucleic acid level or protein level.

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7. A method of preventing bone loss in an individual, said method comprises the step of inhibiting the expression of a WNT signaling antagonist.

8. The method of claim 7, wherein said WNT signaling antagonist is soluble frizzled related protein 3 (SFRP-3/FRZB) or the human homologue of Dickkopf-1 (DKK1).

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9. The method of claim 7, wherein the expression of said antagonist is inhibited at the nucleic acid level or protein level.

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10. A method of controlling bone loss in an individual, comprising the step of inhibiting the expression of the *DKK1* gene (accession number NM012242) or the activity of the protein expressed by the *DKK1* gene.

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11. The method of claim 10, wherein said *DKK1* gene expression is inhibited by anti-sense oligonucleotides, by anti-DKK1 antibodies or soluble LRP receptors.

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12. A method of controlling bone loss in an individual, comprising the step of administering to said individual a pharmacological inhibitor of DKK1 protein.

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13. The method of claim 12, wherein said individual has a disease selected from the group consisting of multiple myeloma, osteoporosis, post-menopausal osteoporosis and malignancy-related bone loss.

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14. The method of claim 13, wherein said malignancy-related bone loss is caused by breast cancer metastasis to the bone or prostate cancer metastasis to the bone.

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